IN THE CLAIMS

Please amend claims 1 and 20 as follows:

1. (Currently amended) Method of post cure correction of tire uniformity for a tire having beads, an axis of rotation, and a tread having an equatorial plane; the method comprising the steps of:

selecting the tire during a tire manufacturing process after the selected tire has been rejected by a tire uniformity test due to at least one tire uniformity defect;

providing a 360 degree circumferential tread restraint which holds the tread of the tire in an ideal tread shape, concentric to the axis of rotation and nominally perpendicular to the equatorial plane, wherein the ideal tread shape closely matches the ideal contour of the tread of the tire when inflated;

sealingly holding the beads concentric to, and equidistant from, the axis of rotation, and symmetrically spaced about the equatorial plane; and

inflating the selected tire to a controlled pressure, and holding the controlled pressure for a controlled time while the tread is restrained and the beads are sealingly held.

2. (original) Method according to claim 1, further comprising the step of:

heating the selected tire before the inflating step.

3. (original) Method according to claim 2, wherein the selected tire has ply cords, the method further comprising:

during the heating step, heating the selected tire to a controlled temperature above a glass transition temperature of the ply cord material; and

before the end of the controlled time, cooling the selected tire below the glass transition temperature of the ply cord material.

4. (original) Method according to claim 2, further comprising:

during the heating step, heating the selected tire to a controlled temperature between 100 degrees F and 300 degrees F.

5. (original) Method according to claim 2, further comprising:

during the heating step, heating the selected tire to a controlled temperature determined by a magnitude of one or more of the at least one tire uniformity defects.

6. (original) Method according to claim 2, wherein:

a location on the selected tire for heating during the heating step is determined by a location and type of one or more of the at least one tire uniformity defects.

7. (original) Method according to claim 2, wherein:

the controlled time is determined by a magnitude of one or more of the at least one tire uniformity defects.

8. (original) Method according to claim 2, wherein:

the controlled pressure is determined by a magnitude of one or more of the at least one tire uniformity defects.

9. (original) Method according to claim 2, wherein:

the controlled pressure is approximately equal to a normal inflation pressure for the selected tire.

10. (original) Method according to claim 1, wherein:

the controlled pressure is determined by a magnitude of one or more of the at least one tire uniformity defects.

11. (original) Method according to claim 1, wherein:

the controlled pressure is between 20 psig and 80 psig.

12. (original) Method according to claim 1, wherein:

the controlled time is determined by a magnitude of one or more of the at least one tire uniformity defects.

13. (original) Method according to claim 1, wherein:

the controlled time is between 15 minutes and 45 minutes.

14. (original) Method according to claim 1, further comprising the step of:

after the inflating step, repeating a tire uniformity test to determine if the selected tire is still rejectable.

15. (original) Method according to claim 14, further comprising:

repeating the method steps of claim 1 if the selected tire is still rejectable.

16. (original) Method according to claim 15, further comprising:

scrapping the selected tire if it is still rejectable after a pre-determined number of repeats of the steps of the method of claim 15.

17. (Currently amended) An apparatus for post cure correction of tire uniformity for a tire having beads, an axis of rotation, and a tread having an equatorial plane; wherein the apparatus comprises:

means for providing 360 degree circumferential tread restraint which holds the tread in an ideal tread shape, concentric to the axis of rotation and nominally perpendicular to the equatorial plane, wherein the ideal tread shape closely matches the ideal contour of the tread of the tire when inflated;

means for sealingly holding the beads concentric to, and equidistant from, the axis of rotation, and symmetrically spaced about the equatorial plane; and

means for inflating the selected tire to a controlled pressure, and holding the controlled

pressure for a controlled time while the tread is restrained and the beads are sealingly held.

18. (original) An apparatus according to claim 17, further comprising:

means for heating the selected tire.

19. (original) An apparatus according to claim 17, further comprising:

means for cooling the selected tire.

Please add new claim 20.

20. (new) Method according to claim 1, further comprising the step of:

shaping the tread restraint such that it touches all of a footprint portion of the tread for orienting the tire and the ply cords to optimize a footprint shape factor.